The Gas Company

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Subject: Comments by Southern California Gas Company and San Diego Gas & Electric Concerning Request for Comments – Pipeline Safety: Enhanced Safety and Environmental Protection for Gas Transmission and Hazardous Liquid Pipelines in High Consequence Areas (Docket No. RSPA-99-6355; Notice 1)

Dear Research and Special Programs Administration:

In reference to the October 2 1, 1999 request for comments concerning the possible need for additional safety and environmental regulations for "gas and hazardous liquid pipelines in high-density population areas, waters where a substantial likelihood of commercial navigation exists and areas unusually sensitive to environmental damage", we at Southern California Gas Company and San Diego Gas & Electric believe that no additional safety and environmental regulations are needed for gas pipelines. We do, however, believe that pipeline integrity is an important issue and while we see no need for additional regulations, we fully support the pursuit of new technology and engineering advances that would lead to greater public safety. In addition, we believe that much of the work that is being done on other key pipeline safety initiatives should be completed and the results well understood, before we embark on developing additional safety and environmental regulations to address high consequence areas. In response to your request for comments on some specific areas addressed in the notice, we offer our thoughts.

Southern California Gas Company is a regulated natural gas distribution utility serving most of central and southern California through 4.8 million meters. As the nation's largest natural gas distributor, we serve residential, commercial and industrial customers as well as electric generation and wholesale customers in a service territory that covers 23,000 square miles. San Diego Gas & Electric is a regulated electric and natural gas distribution utility that provides natural gas service to San Diego County through 700,000 meters. Both Southern California Gas Company and San Diego Gas & Electric are responsible for the safety, reliability and maintenance of their natural gas pipeline systems.

In the notice, it is stated that the Office of Pipeline Safety is considering incorporating a process into the regulations "to validate pipe integrity in high consequence areas." In evaluating this proposal, they state that they are in the process of determining the "extent to which operators now have integrity management programs" and are exploring, "effective ways to promote their development and implementation by all operators" as well as "mechanisms by which O.P.S. could confirm the existence and adequacy of such operator-developed programs." We have an active pipeline integrity

management program. We have a "Pipeline Integrity Team" that addresses the overall operation of our facilities including ensuring strict compliance with the pipeline safety regulations and evaluating our operations to ensure that the risks to our facilities are known and addressed. This team is comprised of engineers and operating personnel who examine all significant incidents to ensure that potential trends are addressed and probable risks are controlled. On a routine basis, this team identifies hazards and vulnerabilities to the pipelines, performs specific risk assessments, evaluates data and performs analyses as needed, prioritizes areas to be addressed and evaluates the applicability of new technology to our operations. In addition, at a strategic level, we work to integrate our operating experience with the study of the interrelationships among various failure causes and known risks, to ensure our resources are directed at protecting public safety and maintaining the integrity of our facilities. In line with the work we are doing in this area, in October, 1999, William Amend, our Materials and Corrosion Team Leader, presented a paper, "Managing the Integrity of a Natural Gas Transmission Pipeline System" at the Pipeline Welding and Technology Conference.

In direct response to some of the questions raised in the notice, we offer the following comments:

1. Under "2. Identifying Affected Pipeline Segments", Question: "What would be the expected cost to an operator to perform this step?" Answer: While even a rough estimate is difficult to make without answers to several of the other questions, we do believe that the costs associated with this activity could be very high.

2. Under "2. Identifying Affected Pipeline Segments", Question: "Should pipeline segments near, but not within, high consequence areas also be examined for possible impact?" Answer: We do not believe there is a need to address those natural gas pipelines that are only "near" a high consequence area. Furthermore, from a broad perspective, for natural gas pipelines, we believe the current class location definitions are sufficient and to further classify "high consequence areas" is not necessary.

3. Under "3. Inspecting and Assessing the Condition of the Affected Segments", Question: "What is the current capability of smart pigs to find prior mechanical damage and other defects?" Answer: Not good at all. In fact, on a scale of '1' to '10', '10' being the highest, we believe that smart pigs would currently rank at '4' which is far from infallible. However, there is significant ongoing industry sponsored research to improve the ability to discriminate various types of anomalies.

4. Under "3. Inspecting and Assessing the Condition of the Affected Segments", Question: "Are current industry standards sufficient for pipelines in high consequence areas? For example, is the A.S.M.E. B.3 1 standard, used by operators to determine acceptable pipe wall loss, appropriate in high consequence areas?" Answer: Yes.

5. Under "4. Assessing the Need for Preventive or Mitigative Actions", we strongly endorse the thought that "assessments should be performed as part of an integrated, segment-specific assessment of the possible causes of pipeline failure" including the identification of "cost-effective actions to reduce the specific risks identified on these segments."

6. Under "5. Repairing the Affected Segments as Necessary", Question: "Should current industry standards (e.g., A.S.M.E. B.3 1G) be used as the repair criteria, or do other

methodologies exist or need to be developed for pipelines in high consequence areas?" Answer: While we believe the development of additional criteria, over time, may be beneficial, in the short term, we believe the use of other guidelines and recommended practices such as RSTRENG and A.P.I. Publication 1156 – Effects of Smooth and Rock Dents on Liquid Petroleum Pipelines should be permitted.

7. Under "6. Implementing and Monitoring Other Cost-Effective Risk Control Activities", Question: "How can operators monitor the effectiveness of risk control activities?" Answer: While analysis may take several forms, we believe a comprehensive pipeline risk assessment and risk management program will incorporate a number of systems and standards for monitoring the effectiveness of risk control activities. However, fundamental assessments likely to be utilized would include comparisons of current data to historical trends on such factors as incidents per mile per year, leakage rates, etc.

As we review the overall adequacy of the pipeline safety regulations, we note that energy demand is increasing in many areas of the country and that natural gas transmission pipelines, on both an absolute and relative basis, are very safe. Our overall safety record for the past many years is excellent. In fact, in 1995 as a typical year, there were fewer fatalities from natural gas transmission pipeline incidents than from dog bites or due to lightning strikes. If we broaden the analysis, there were over 500 times as many deaths in 1995 due to railway accidents than were attributable to natural gas transmission pipeline incidents. That said, we believe that the natural gas transmission pipeline system, when properly operated and maintained in accordance with the existing pipeline safety regulations, is of minimal risk to public safety. Furthermore, while we continually strive to reduce the risk to public safety through technological advances and improved practices, we believe putting more emphasis and resources towards research would ultimately serve the interests of the public more than additional regulations at this point in time.

In addition to advocating additional resources for research, we would like to recognize some of the good work that has been done on a variety of initiatives and studies that we believe, will serve the public and operators well. One particular example that is particularly noteworthy is the work that was done in the development of the "Common Ground Study". The culmination of the work done in this area included the identification of best practices in damage prevention. These best practices are designed to address an area where a genuine need exists and once fully implemented, they are likely to result in a reduction in the damage to underground pipelines. However, we need to take time to implement these best practices and then, with all stakeholders working together, evaluate the success of the practices in preventing damage to our facilities. We look forward to working with the Office of Pipeline Safety, other operators, etc. to address damage prevention challenges in the next few years including performing an evaluation of the success of these best practices. Clearly, the considerable efforts put forth to develop these best practices should not be abandoned in favor of new initiatives but rather, we should move through implementation and evaluation before we undertake new projects that are likely to address similar operating issues.

Other examples of work that we believe is very important that should continue to be pursued is the work being done in support of the Risk Management Initiative and the development of the National Pipeline Mapping System. The results of these projects need to be understood as does the information gathered from the L.D.C.-R.A.F.T. work as well as some of the operator specific pilot programs. Once the results of these "works in progress" are known, we believe that we will be in a

better position to evaluate which regulations, if any, should be changed to further enhance safety and environmental protection. At that point, broader use of various processes such as system integrity inspections, high impact inspections and the application of risk management demonstration programs will be better understood and as such, better evaluated and compared.

In closing, we believe that existing regulations are adequate and we see no need at this time for additional safety and environmental regulations for gas pipelines in high consequence areas. In addition, we believe that it would be wise to postpone further study of this issue until some of the other key pipeline safety initiatives and studies are completed. However, we look forward to working with the Office of Pipeline Safety as they conduct their evaluation. Thank you for the opportunity to submit comments concerning this issue. Please let me know if we can provide you with any additional information or if you would like to discuss these comments.

Respectfully submitted,

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